

## REMARKS

This submission is in response to the Office Action dated July 11, 2008 (the "Office Action"). Claims 1–39 are pending in the application. Applicants have amended claims 1, 2, 10-20, 23-24, 30, 31 and 35 without prejudice or disclaimer. Applicants have added new claims 38 and 39. No new matter has been added.

### Drawing Objections

In the Office Action, the Drawings were objected to for failing to comply with 37 CFR 1.184(p)(5) for not including the reference characters M and A of Fig. 4. In response, Fig. 4 has been amended by properly changing the labeling designation "M" to the labeling designation "motor". With regard to reference character "A", Applicant respectfully points out to the Examiner that paragraph 50 of the specification explicitly refers to double headed arrow A. Paragraph 50 recites in part: The optical pickup head 102 can move along a direction indicated by the double headed arrow A ....

In the Office Action, the Drawings were also objected to for failing to comply with 37 CFR 1.184(p)(5) for not including certain reference signs mentioned in the description. In response, the specification has been amended to explicitly recite that reference character "5" refers to "5a, 5b, 5c, 5d and 5e". Withdrawal of the objection is respectfully requested.

### Specification Objections

In the Office Action the Specification was objected to at page 8 of the Specification for failing to properly label the optical element. By means of the present amendment, the Specification has been amended in a manner which is believed to overcome the objection. Withdrawal of the objection is respectfully requested.

### **Claim Objections**

Claim 16 was objected to for lacking a period at the end of the claim. Claim 16 has been amended in a manner which is believed to overcome the objection.

Claim 30 was objected to for lacking proper antecedent basis. Claim 30 has been amended in a manner which is believed to overcome the objection.

Claim 35 was objected to for improper dependency. Claim 35 has been amended in a manner which is believed to overcome the objection.

### **112 Rejections**

Claims 10-20 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention. Claims 10-20 have been amended in a manner which is believed to overcome the objection.

### **102 Rejections**

#### **Claims 1-2, 8, 20, 22, 29 and 31-34 are allowable**

The Office has rejected claims 1-2, 8, 20, 22, 29, 31-34 at paragraph 13 of the Office Action, under 35 U.S.C. § 102(b), as being anticipated by U.S. Patent No. 3,588,255 ("Alexander"). Applicants respectfully traverse the rejections.

#### **A. Claims 1-2, 8, 20, 22 and 29 are allowable**

The cited portions of Alexander do not anticipate claim 1 because the cited portions of Alexander do not teach every element of claim 1. For example, the cited portions of Alexander do not teach wherein said at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light

receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11), as in claim 1 (Emphasis Added). In contrast to claim 1, Alexander discloses a target device 308B comprising a ring or circular array of eight photodetectors 308B1 – B8 surrounding a central optical passage 314B in a parabolic reflector 316. *See* Alexander, col. 12, lines 57-60 in view of Figs. 26 and 27. Accordingly, Alexander does not disclose at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11), as in claim 1. Therefore, claim 1 is allowable.

Claims 2, 8, 20, 22 and 29 depend from claim 1, which Applicant has shown to be allowable. Accordingly, claims 2, 8, 20, 22 and 29 are also allowable, at least by virtue of their dependency from claim 1. *See* Alexander, abstract.

#### **B. Claims 31-34 are allowable**

The cited portions of Alexander do not anticipate claim 31 because the cited portions of Alexander do not teach every element of claim 1. For example, the cited portions of Alexander do not teach the at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11) is used to align the optical element (1) and the light beam (2), as in claim 31. In contrast to claim 31, the cited portions of Alexander teach systems and methods for establishing and maintaining a laser beam in a straight line reference in space in which a laser device emits two laser beams in opposed straight line relationship in combination with reflective targets for each of the laser beams. Accordingly, Alexander does not disclose at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11) is used to align the optical element (1) and the light beam (2), as in claim 31. Therefore, claim 31 is allowable.

Claims 32-34 depend from claim 31, which Applicant has shown to be allowable. Accordingly, claims 32-34 are also allowable, at least by virtue of their dependency from claim 31.

**Claims 1-2, 8, 9 and 22 are allowable**

The Office has rejected claims 1-2, 8, 9 and 22 at paragraph 14 of the Office Action, under 35 U.S.C. § 102(b), as being anticipated by U.S. Patent No. 4,320,462 ("Lund"). Applicants respectfully traverse the rejections.

The cited portions of Lund do not anticipate claim 1 because the cited portions of Lund do not teach every element of claim 1. For example, the cited portions of Lund do not teach wherein said at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11), as in claim 1 (Emphasis Added). In contrast to claim 1, the cited portions of Lund teach a two-dimensional detector array 24 disposed at the primary focal plane of the optical system 23. The detector array may have one thousand detector elements. See Lund, col. 2, lines 25 – 35. Accordingly, Lund does not disclose at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11) is used to align the optical element (1) and the light beam (2), as in claim 31. Therefore, claim 1 is allowable.

Claims 2, 8, 9, and 22 depend from claim 1, which Applicant has shown to be allowable. Accordingly, claims 2, 8, 9 and 22 are also allowable, at least by virtue of their dependency from claim 1.

**Claims 1-2, 4-8, 20, 22, 24 and 37 are allowable**

The Office has rejected claims 1-2, 4-8, 20, 22, 24 and 37 at paragraph 15 of the Office Action, under 35 U.S.C. § 102(b), as being anticipated by U.S. Patent No. 3,588,255 ("Kuwahara"). Applicants respectfully traverse the rejections.

The cited portions of Kuwahara do not anticipate claim 1 because the cited portions of Kuwahara do not teach every element of claim 1. For example, the cited portions of Kuwahara do not teach wherein said at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11), as in claim 1 (Emphasis Added). In contrast to claim 1, Kuwahara discloses in FIGS. 2A and 2B, a bottom view and a schematic cross sectional view, respectively, of one of the apertures in the optical probe array head devices of an optical detector-integral type in FIG. 1. The optical detector utilizes a pn junction. Near-field light 20 generated at the aperture 2 is scattered by recording marks 17 in the recording layer 16 provided on the substrate 19 of the recording medium 3 and the scattered light 21 enters the optical detector. The optical signals are converted to electric signals at the pn junction formed from a low-doping p-type semiconductor 10 and a low-doping n-type semiconductor 12 and provided on the bottom surface of the optical probe array head. The electric signals are taken out to the outside through the circuit wiring part 15 surrounded by the electric insulator 14 and further embedded within the optical probe array head. In FIG. 2A, the part disposed to encircle the apertures as a whole constitutes a single optical detector pn junction surrounded by a high-doping p-type semiconductor 9 or a high-doping n-type semiconductor 11. See Kuwahara, col. 3, lines 40-65 in view of FIGS. 2A and 2B. It is respectfully submitted that the configuration of Kuwahara describing an optical detector pn junction surrounded by a high doping p-type or n-type semiconductor material is different from a configuration in which at least one light-detection element (3) is configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11), as in claim 1 (Emphasis Added). Therefore, claim 1 is allowable.

Claims 2, 4-8, 20, 22, 24 and 37 depend from claim 1, which Applicant has shown to be allowable. Accordingly, claims 2, 4-8, 20, 22, 24 and 37 are also allowable, at least by virtue of their dependency from claim 1.

### **103 Rejections**

#### **Claims 3, 21, 35 and 36 are allowable**

The Office has rejected claims 3, 21, 35 and 36 at paragraph 17 of the Office Action, under 35 U.S.C. § 103(a), as being unpatentable over Alexander in view of U.S. Patent No. 4,524,282 (“King”) and U.S. Patent No. 4,325,145 (“Corbett”). Applicants respectfully traverse the rejections.

#### **A. Claims 3 and 21 are allowable**

As explained above, the cited portions of Alexander does not disclose each of the elements of claim 1, from which claims 3 and 21 depend. The cited portions of King and Corbett, alone and in any reasonable combination, do not disclose the elements of claim 1 that are not disclosed by Alexander. For example, King and Corbett do not disclose wherein said at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11). In the Office Action, Corbett is cited for teaching that laser energy may be detected with thermocouples via a measurement of temperature dependent change in resistance. See Corbett, col. 1, lines 5-20. In the Office Action, King is cited for disclosing that a change in resistance is used to determine the levelness relative to a laser beam. See King, col. 1, lines 20-50.

Therefore, the cited portions of Alexander, King and Corbett, separately or in combination, do not disclose or suggest each and every element of claim 1 or of claims 3 and 21 which depend from claim 1. Hence, claims 3 and 21 are allowable.

**B. Claims 35 and 36 are allowable**

As explained above, the cited portions of Alexander does not disclose each of the elements of claim 31, from which claims 35 and 36 depend. The cited portions of King and Corbett, alone and in any reasonable combination, do not disclose the elements of claim 31 that are not disclosed by Alexander. For example, King and Corbett do not disclose at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11). In the Office Action, Corbett is cited for teaching that laser energy may be detected with thermocouples via a measurement of temperature dependent change in resistance. See Corbett, col. 1, lines 5-20. In the Office Action, King is cited for disclosing that a change in resistance is used to determine the levelness relative to a laser beam. See King, col. 1, lines 20-50.

Therefore, the cited portions of Alexander, King and Corbett, separately or in combination, do not disclose or suggest each and every element of claim 31 or of claims 35 and 36 which depend from claim 31. Hence, claims 35 and 36 are allowable.

**Claims 3 and 23 are allowable**

The Office has rejected claims 3 and 23 at paragraph 18 of the Office Action, under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent No. 6,542,455 (“Kuwahara”) in view of King and Corbett.

Claims 3 and 23 include elements not found in the cited portions of Kuwahara, King and Corbett. As explained above, Kuwahara does not disclose each and every element of claim 1, from which claims 3 and 23 depend. King and Corbett do not disclose the elements of claim 1 that are not disclosed by Kuwahara. In the Office Action, King is cited for disclosing that a change in resistance is used to determine the levelness relative to a laser beam. See King, col. 1, lines 20-50. Corbett does not disclose the elements of claim 1 that are not disclosed by Kuwahara. In the Office Action, Corbett is cited for teaching that laser energy may be detected with thermocouples via a

measurement of temperature dependent change in resistance. See Corbett, col. 1, lines 5-20.

Therefore, the cited portions of Kuwahara, King and Corbett, separately or in combination, do not disclose or suggest each and every element of claim 1 or of claims 3 and 23 which depend from claim 1. Hence, claims 3 and 23 are allowable.

**Claims 10 and 11 are allowable**

The Office has rejected claims 10 and 11 at paragraph 19 of the Office Action, under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent No. 4,320,462 ("Lund").

As explained above, the cited portions of Lund do not disclose each of the elements of claim 1, from which claims 10 and 11 depend. Therefore, the cited portions of Lund do not disclose or suggest each and every element of claim 1 or of claims 10 and 11 which depend from claim 1. Hence, claims 10 and 11 are allowable.

**Claims 12 and 13 are allowable**

The Office has rejected claims 12 and 30 at paragraph 20 of the Office Action, under 35 U.S.C. § 103(a), as being unpatentable over Kuwahara in view of U.S. Patent No. 3,678,283 ("LaBaw").

As explained above, the cited portions of Kuwahara do not disclose each of the elements of claim 1, from which claims 12 and 30 depend. The cited portions of LaBaw do not disclose the elements of claim 1 that are not disclosed by Kuwahara. LaBaw does not disclose wherein said at least one light-detection element (3) configured in the shape of an interrupted ring substantially surrounding the light receiving section (11) within said receiving plane and arranged adjacent said light receiving section (11), as in claim 1. In the Office Action, LaBaw is cited for disclosing that in a radiation sensitive optical tracker, photodetectors are made via thin layer deposition. See LaBaw, col. 2, lines 10-15.



Therefore, the cited portions of Kuwahara and Labaw, separately or in combination, do not disclose or suggest each and every element of claim 1 or of claims 12 and 13 which depend from claim 1. Hence, claims 12 and 13 are allowable.

**Claims 13–19 are allowable**

The Office has rejected claims 13–19 at paragraph 21 of the Office Action, under 35 U.S.C. § 103(a), as being unpatentable over Kuwahara.

As explained above, the cited portions of Kuwhara does not disclose each of the elements of claim 1, from which claims 13–19 depend. Therefore, claims 13–19 are allowable.

**Claims 25–28 are allowable**

The Office has rejected claims 25–28 at paragraph 22 of the Office Action, under 35 U.S.C. § 103(a), as being unpatentable over Alexander.

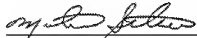
As explained above, the cited portions of Alexander does not disclose each of the elements of claim 1, from which claims 25-28 depend. Therefore, claims 25-28 are allowable.

**CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-39 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mike Belk, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-945-6000.

Respectfully submitted,



Michael A. Scaturro  
Reg. No. 51,356  
Attorney for Applicant

**Mailing Address:**  
**Intellectual Property Counsel**  
**Philips Electronics North America Corp.**  
**P.O. Box 3001**  
**345 Scarborough Road**  
**Briarcliff Manor, New York 10510-8001**